Melampus flavus Gmel. Abundant.

These shells were not intermingled with marine forms, which strew the shore on both sides of the peninsula. The identifications are by Bryant Walker.

ON THE VALIDITY OF UNIO UNDATUS BARNES.

BY BRYANT WALKER.

This species, which is apparently easily identifiable, has been buried in the synonymy for over half a century. A careful study both of the literature and of a considerable amount of material has convinced me that it is entitled to recognition as a valid species.

The synonymic history of the species is, briefly, as follows; It was described by Barnes in 1823 (Am. Jour. Sci. VI, p. 121, pl. IV, fig. 4) and was based on specimens collected by Schoolcraft in the Wisconsin and Fox rivers.

In 1828, Hildreth (Am. Jour. Sci. XIX, p. 280) recognized the species among the *Unionidæ* of the Muskingum river, Ohio, and as his paper was submitted to Barnes before publication, there is apparently no doubt but that his identification was correct.

In his first attempt at an arrangement of the North American *Unionidæ* in 1829 (Obs. I p. 32) Dr. Lea considered it as a synonym of *U. mytiloides* Raf.

In 1833, (Obs. I p. 200) after his return from Europe, where he had studied the Lamarckian types, he declared Barnes' species to be the same as *U. obliquus* of that author.

In the meantime, in 1831, Lea (Tr. Phil. Soc. IV. p. 110 pl. XVI fig. 40) had described his *Unio trigonus* from the Ohio as a new species.

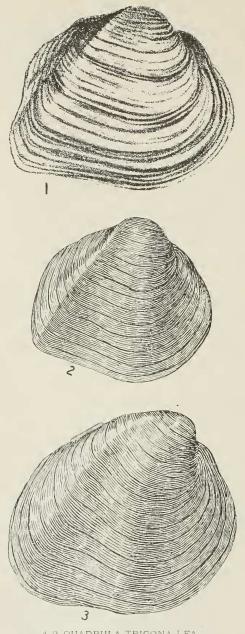
It is to be noted that Barnes died in 1828 before trigonus was described, so that he was not able to express his opinion as to the validity of Lea's species.

In 1834, Conrad in his "Synoptical Table" (New F. W. Shells p. 72) considered the two species as synonymous and gave *undatus* priority.

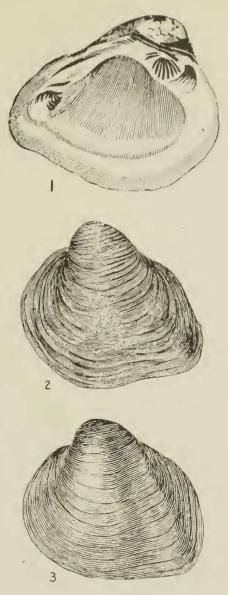
In the same year, Say in his "Synonymy" (Amer. Con. Pt. VI) did the same.

Ferussac in 1835 (Guer. Mag. I p. 28), after Dr. Lea had visited





1. 2, QUADRULA TRIGONA LEA 3. QUADRULA OBLIQUA LAM



QUADRULA UNDATA BARNES.

